

## CLAIMS

1.-77. (Cancelled)

78. (Original) A dental surgical stent, comprising:

- (a) an active stent portion adapted to fit over a portion of a jaw bone; and
- (b) at least one visual indicator showing an activation state of said stent.

79. (Original) A dental surgical stent, comprising:

- (a) a surgical stent portion adapted for mounting on a jaw; and
- (b) a drill guide including at least one encoder which generates a signal indicative of at least one of a position and orientation of the drill guide.

80. (Original) A stent according to claim 79, wherein said surgical stent is machined for a particular jaw.

81. (Original) A stent according to claim 79, wherein said surgical stent comprises at least one mounting point for said drill guide.

82. (New) A stent according to claim 81, wherein said at least one mounting point is adapted for selective attachment and removal of said guide.

83. (New) A stent according to claim 79, wherein said at least one encoder comprises at least three encoders.

84. (New) A stent according to claim 78, wherein said active stent portion comprises at least one bone detection sensor.

85. (New) A stent according to claim 84, wherein said sensor is an invasive sensor.

86. (New) A stent according to claim 85, wherein said sensor comprises a plurality of pins adapted to be advanced towards the bone.

87. (New) A stent according to claim 78, wherein said active stent portion comprises at least one drill guide.

88. (New) A stent according to claim 78, wherein said active stent portion comprises at least one data transmitter.

89. (New) A method of bone mapping comprising:

- (a) first contact mapping a jaw bone at a first tooth location at a first time, to provide a first map;
- (b) second mapping said jaw bone to provide a second, different, map; and
- (c) making a dental diagnosis responsive to a difference between said maps.

90. (New) A method according to claim 89, wherein said second mapping comprises contact mapping.

91. (New) A method according to claim 90, wherein contact mapping comprises contacting said bone with at least one mechanical probe.

92. (New) A method according to claim 90, wherein contact mapping comprises contacting said bone with at least two mechanical probes simultaneously.

93. (New) A method according to claim 91, wherein said contacting is through a gum of said bone.

94. (New) A method according to claim 90, wherein said contact mapping comprises both two sides and a top of said bone.

95. (New) A method according to claim 90, wherein said first and second contact mapping comprises contact mapping of a same location at different times.

96. (New) A method according to claim 95, wherein said diagnosis comprises assessing a receding of said bone.

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97. (New) A method according to claim 95, wherein said diagnosis comprises assessing an effect of treatment of said bone to build up said bone.

98. (New) A method according to claim 95, wherein said diagnosis comprises assessing the progress of a periodontal disease.

99. (New) A method according to claim 90, wherein said first and second contact mapping comprises contact mapping of different locations on said bone.

100. (New) A method according to claim 99, wherein said diagnosis comprises screening for an implantation location.

101. (New) A method according to claim 89, wherein said second mapping is non-contact mapping of said bone.

102. (New) A method according to claim 90, wherein said first contact mapping is conducted using a mapping-only instrument not including a drill guide.

103. (New) A method according to claim 90, comprising marking said first location or a reference thereto.